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Outgoing
c/007/0012
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From: April Abate
To: Patrick Collins
CC: Jim Smith; Karla Knoop; OGMCOAL@utah.gov; Steve Demczak
Date: 11/20/2008 3:49 PM
Subject: Water Monitoring Reports 2nd & 3rd Quarter 2008
Place: OGMCOAL@utah.gov
Attachments: 0014.pdf; 0015.pdf; April Abate.vcf

Hello Patrick,

It was good to meet you on Tuesday and get a tour of the Wellington site. I had the opportunity to review the water monitoring data for the 2nd and 3rd quarters. Attached please find the reports summarizing the data evaluation. For wells 15A and 15B, it seems as if there are a lot of parameters outside of 2 standard deviation limits. Is there anything unusual happening with these wells? Are they a couplet (i.e., adjacent to each other and measuring shallow and deep groundwater?). As I recommended in one of the reports, if you could provide some explanation as to what may be happening with these wells, that would be appreciated.

Another important point I want to make is that you are due for permit renewal in 2009, which requires you to resample for ALL baseline parameters in 2008. I notice that has not occurred in Q1, Q2, and Q3 of 2008. Were you planning to conduct the full baseline sampling in the fourth quarter? I just wanted you to be aware of this requirement, if you were not already.

Please call me if you have any questions about these matters or would like to discuss them further.

Regards,

April

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WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

November 19, 2008

TO: Internal File

THRU: James D. Smith, Permit Supervisor *JS 11/20/08*

FROM: *AAA* April A. Abate, Environmental Scientist/Hydrologist

RE: 2008 Second Quarter Water Monitoring, Nevada Electric Investment Corporation, Wellington Preparation Plant, C/007/0012, Task ID #2676

The Wellington Preparation Plant is currently in temporary cessation. No mining or coal processing activities currently take place there, nor is the site in active reclamation. Water-monitoring requirements are in Sections 7.23 and 7.31.2 through 7.31.22, and Tables 7.24-2 and 7.24-5 of the MRP.

1. On what date does the MRP require a five-year re-sampling of baseline water data.

Baseline parameters will be collected in the year preceding permit renewal. The next renewal submittal is due 08/10/09 and the next renewal is due 12/10/09, so five-year baseline sampling should be done by fourth quarter 2008.

2. Were data submitted for all of the MRP required sites?

There is no spring or in-mine monitoring at this site.

Streams and Ponds

YES ☒ NO ☐

The Permittee is required to analyze samples from streams at SW-1, SW-2A, SW-3, and SW-4 and from ponds at SW-5, SW-6, SW-7, and SW-8 for the parameters in Table 7.24-5, and to measure flow only at SW-2. In addition, samples from SW-4 and SW-5 are to also be analyzed for benzene, toluene, ethylbenzene, xylene, and naphthalene (BTEXN) and propylene glycol. Monitoring is done quarterly. All surface water data were reported as within normal ranges.

Wells

YES ☒ NO ☐

The Permittee is required to analyze samples from GW-1, GW-3, GW-4, GW-6, GW-7, GW-8, GW-9, GW-9B, GW-10, GW-12, GW-13, GW-14, GW-15A, GW-15B, GW-16, and GW-17 for the parameters in Table 7.24-2, and to measure depth only at GW-2. In addition, samples from GW-4 and GW-6 are to also be analyzed for BTEXN and propylene glycol. Monitoring is to be done quarterly.

There was insufficient water to collect a sample for analysis at GW-3, GW-13 and GW-17 during the second quarter 2008.

UPDES

YES ☒ NO ☐

Six UPDES permitted outfalls at the Wellington Preparation Plant are monitored monthly: #UTG040010-003, 004, 005, 006, 007, and 008. There was no reported flow at any of the UPDES sites during the second quarter 2008.

3. Were all required parameters reported for each site?

Streams and Ponds

YES ☒ NO ☐

SW-3, SW-4, and all the ponds were dry during the second quarter 2008.

Wells

YES ☐ NO ☒

Static water level was measured but inflow was not sufficient to allow purging and sampling at GW-3, GW-13, and GW-17 during the second quarter 2008.

UPDES

YES ☒ NO ☐

4. Were any irregularities found in the data?

Listed parameters were more than two standard deviations from the mean. An asterisk (*) indicates this is not a parameter specifically required by the MRP.

Streams and Ponds

YES ☐ NO ☒

Wells

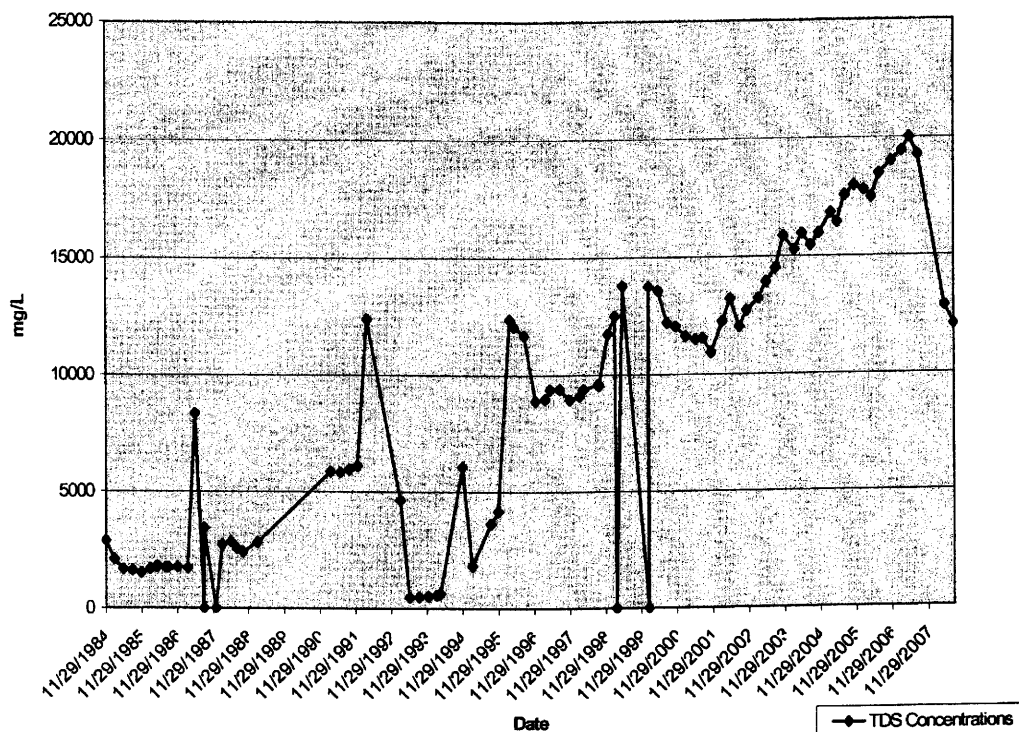
YES ☒

NO ☐

Parameter	Wells
Field Specific Conductivity	GW-15B
Lab specific conductivity	GW-15A, GW-15B
Bicarbonate as CaCO ₃	GW-12
Total hardness	GW-1, GW-15A, GW-15B, GW-16
Sulfate	GW-15A, GW-15B
Dissolved Ca	GW-1, GW-15A, GW-16
Dissolved Mg	GW-1, GW-4, GW-9B
Dissolved Na	GW-9B, GW-15A
Dissolved K	GW-15A
Total anions*	GW-9B, GW-15B
Total cations*	GW-9B, GW-15A, GW-15B
TDS	GW-15A, GW-15B
Cl	GW-15B

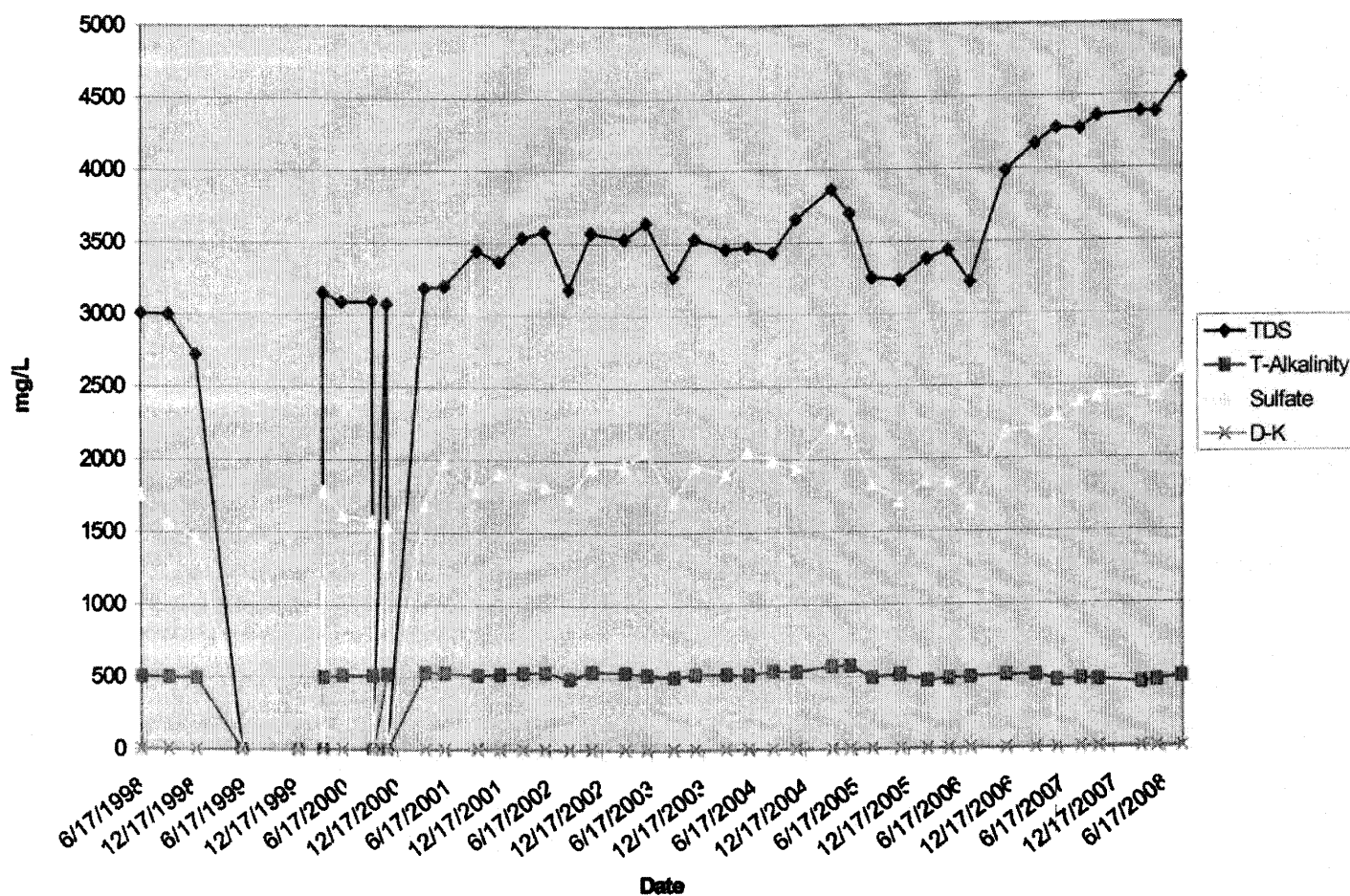
Dissolved solids have been increasing in GW-12 for the past several years (see chart below). The reason for this increase is not evident. However, a sharp drop in TDS concentrations is noted during the second quarter of 2008.

Total Dissolved Solids in GW-12



Several parameters have been outside two standard deviations from the mean at GW-15A and GW-15B, although values do not appear to be extreme or changing rapidly. A chart for GW-15A is included below: data for GW-15B are similar.

GW-15A
TDS, Total Alkalinity, Sulfate, Dissolved Potassium



UPDES

YES ☐ NO ☐

Not Applicable. No discharges were reported from any of the UPDES monitoring locations.

5. Did the Permittee make a timely submittal of all data, including initially missing data, and satisfactorily explain irregular data? YES ☒ NO ☐

6. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements? YES ☐ NO ☒

7. Based on your review, what further actions, if any, do you recommend?

Baseline parameters are to be collected in the year preceding permit renewal. The next renewal submittal is due 08/10/09 and the next renewal is due 12/10/09, so analyses for all baseline parameters need to be done this year (2008).

8. Follow-up from last quarter, if necessary.
None

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WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

November 20, 2008

TO: Internal File

THRU: James D. Smith, Permit Supervisor

FROM: *Qaa* April A. Abate, Environmental Scientist/Hydrologist

RE: 2008 Third Quarter Water Monitoring, Nevada Electric Investment Corporation,
Wellington Preparation Plant, C/007/0012, Task ID #2676

The Wellington Preparation Plant is currently in temporary cessation. No mining or coal processing activities currently take place there, nor is the site in active reclamation. Water-monitoring requirements are in Sections 7.23 and 7.31.2 through 7.31.22, and Tables 7.24-2 and 7.24-5 of the MRP.

1. On what date does the MRP require a five-year re-sampling of baseline water data.

Baseline parameters will be collected in the year preceding permit renewal. The next renewal submittal is due 08/10/09 and the next renewal is due 12/10/09, so five-year baseline resampling should be done by fourth quarter 2008.

2. Were data submitted for all of the MRP required sites?

There is no spring or in-mine monitoring at this site.

Streams and Ponds

YES ☒ NO ☐

The Permittee is required to analyze samples from streams at SW-1, SW-2A, SW-3, and SW-4 and from ponds at SW-5, SW-6, SW-7, and SW-8 for the parameters in Table 7.24-5, and to measure flow only at SW-2. In addition, samples from SW-4 and SW-5 are to also be analyzed for benzene, toluene, ethylbenzene, xylene, and naphthalene (BTEXN) and propylene glycol. Monitoring is done quarterly. All surface water data were reported as within normal ranges.

Wells

YES ☒ NO ☐

The Permittee is required to analyze samples from GW-1, GW-3, GW-4, GW-6, GW-7, GW-8, GW-9, GW-9B, GW-10, GW-12, GW-13, GW-14, GW-15A, GW-15B, GW-16, and GW-17 for the parameters in Table 7.24-2, and to measure depth only at GW-2. In addition, samples from GW-4 and GW-6 are to also be analyzed for BTEXN and propylene glycol. Monitoring is to be done quarterly.

There was insufficient water to collect a sample for analysis at GW-3, GW-13 and GW-17 during the third quarter 2008.

UPDES

YES ☒ NO ☐

Six UPDES permitted outfalls at the Wellington Preparation Plant are monitored monthly: #UTG040010-003, 004, 005, 006, 007, and 008. There was no reported flow at any of the UPDES sites during the third quarter 2008.

3. Were all required parameters reported for each site?

Streams and Ponds

YES ☐ NO ☒

SW-3, SW-4, and all the ponds were dry during the third quarter 2008.

Wells

YES ☐ NO ☒

Static water level was measured but inflow was not sufficient to allow purging and sampling at GW-3, GW-13, and GW-17 during the third quarter 2008.

UPDES

YES ☒ NO ☐

4. Were any irregularities found in the data?

Listed parameters were more than two standard deviations from the mean. An asterisk (*) indicates this is not a parameter specifically required by the MRP.

Streams and Ponds

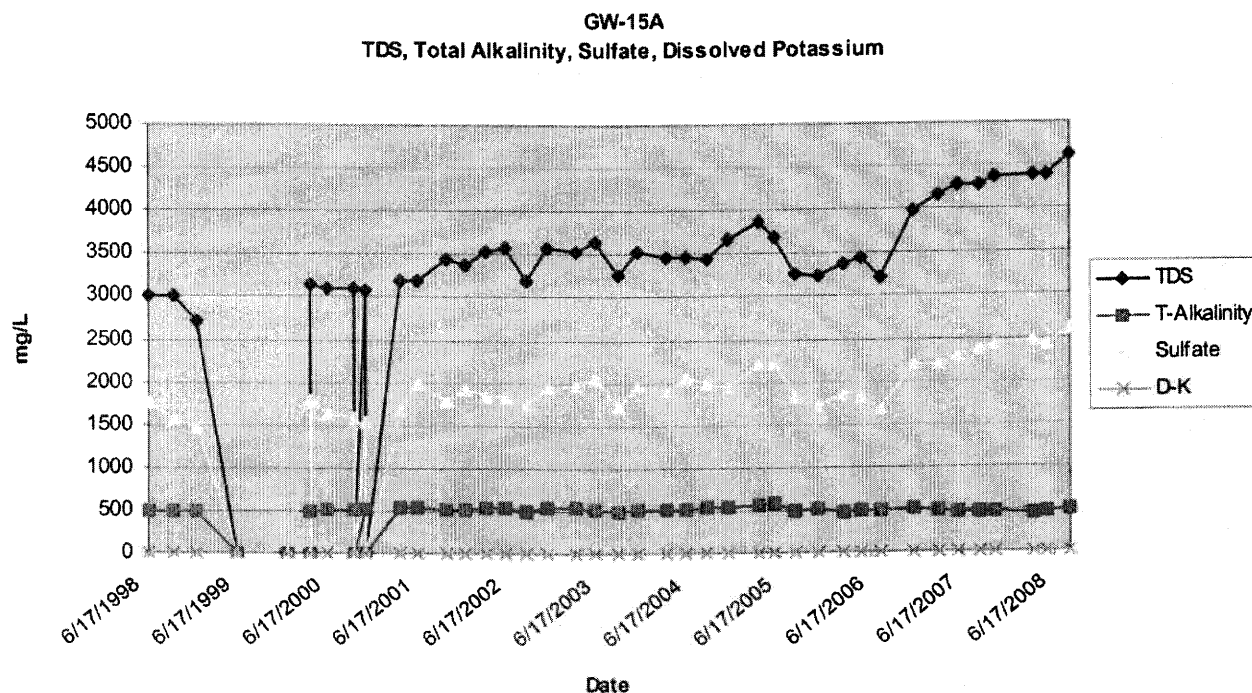
YES ☐ NO ☒

Wells

YES ☒ NO ☐

Parameter	Wells
Field Specific Conductivity	GW-12, GW-15B
Lab specific conductivity	GW-9B
Bicarbonate as CaCO ₃	GW-9B, GW-12
Total hardness	GW-1, GW-15A
Sulfate	GW-15A, GW-15B
Dissolved Ca	GW-15A
Dissolved Na	GW-15A, GW-15B
Dissolved K	GW-15A
Total anions*	GW-15A, GW-15B
Total cations*	GW-15A, GW-15B
TDS	GW-15A
Cl	GW-15B

Several parameters have been outside two standard deviations from the mean at GW-15A and GW-15B. Upward trends for TDS and sulfate are shown in GW-15A (see chart below); data for GW-15B are similar.



UPDES

YES ☐ NO ☐

Not Applicable. No discharges were reported from any of the UPDES monitoring locations.

5. Did the Permittee make a timely submittal of all data, including initially missing data, and satisfactorily explain irregular data? YES ☒ NO ☐

6. Does the Mine Permittee need to submit more information to fulfill this quarter's monitoring requirements? YES ☐ NO ☒

7. Based on your review, what further actions, if any, do you recommend?

Baseline parameters are to be collected in the year preceding permit renewal. The next renewal submittal is due 08/10/09 and the next renewal is due 12/10/09, so analyses for all baseline parameters need to be done by fourth quarter sampling 2008.

Additionally, based on elevated trends in TDS and other parameters seen in both GW-15A and GW-15B, which are located north of Siaperas Ditch, the Permittee should examine these data more closely to draw conclusions as to the reason for these upward trends in TDS, sulfates and other parameters are present.

8. Follow-up from last quarter, if necessary.
None

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